From Pixels to Atoms and Beyond

Creating a Design System with Adobe, Figma and Atomic Design

Caffeine for the Creative Mind Exercise

Types of Digital Images

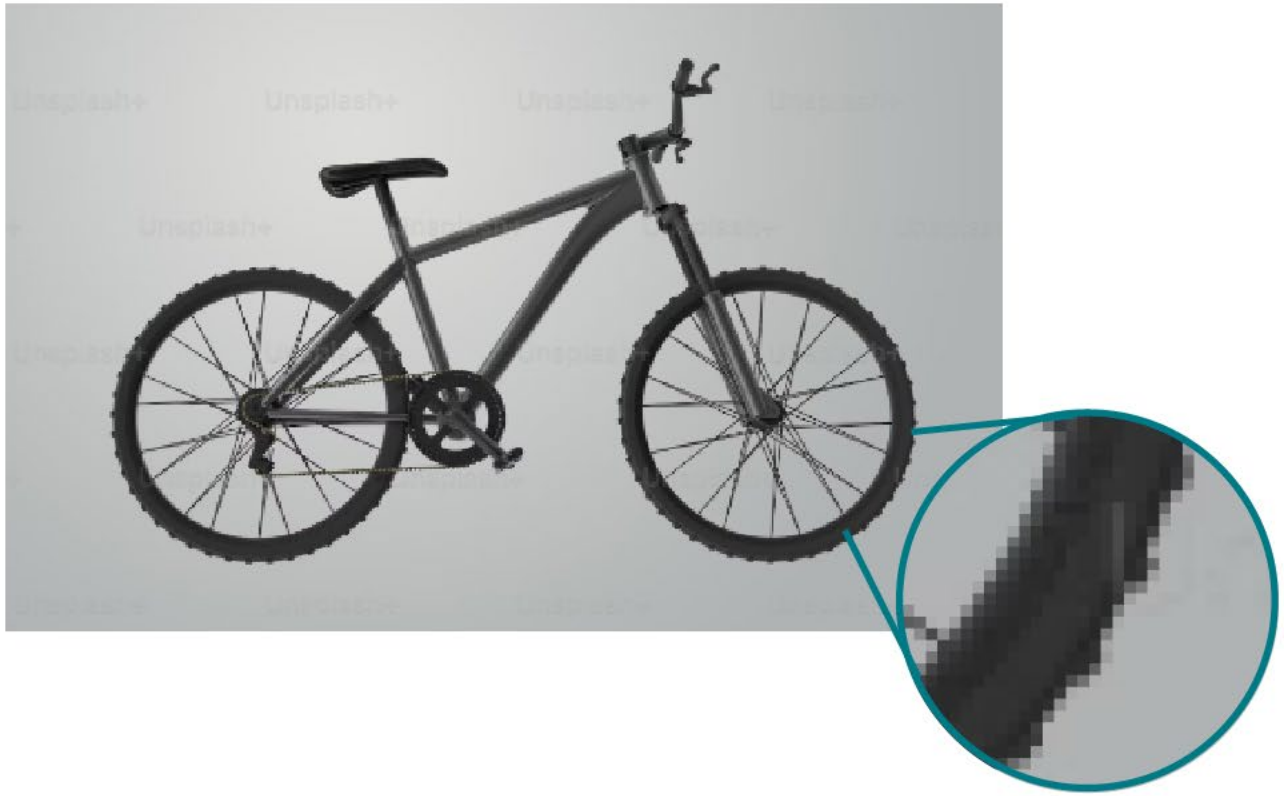
Raster Images

- Raster images are compiled using pixels containing unique color and tonal information that come together to create the image.
- Since raster images are pixel based, their quality is dependent on:
  - the number of pixels that make up the image
  - how many pixels are displayed per inch
- Raster images tend to have more detailed colors and shading than vector images, and they tend to handle detailed textures and precise edits better than vector graphics

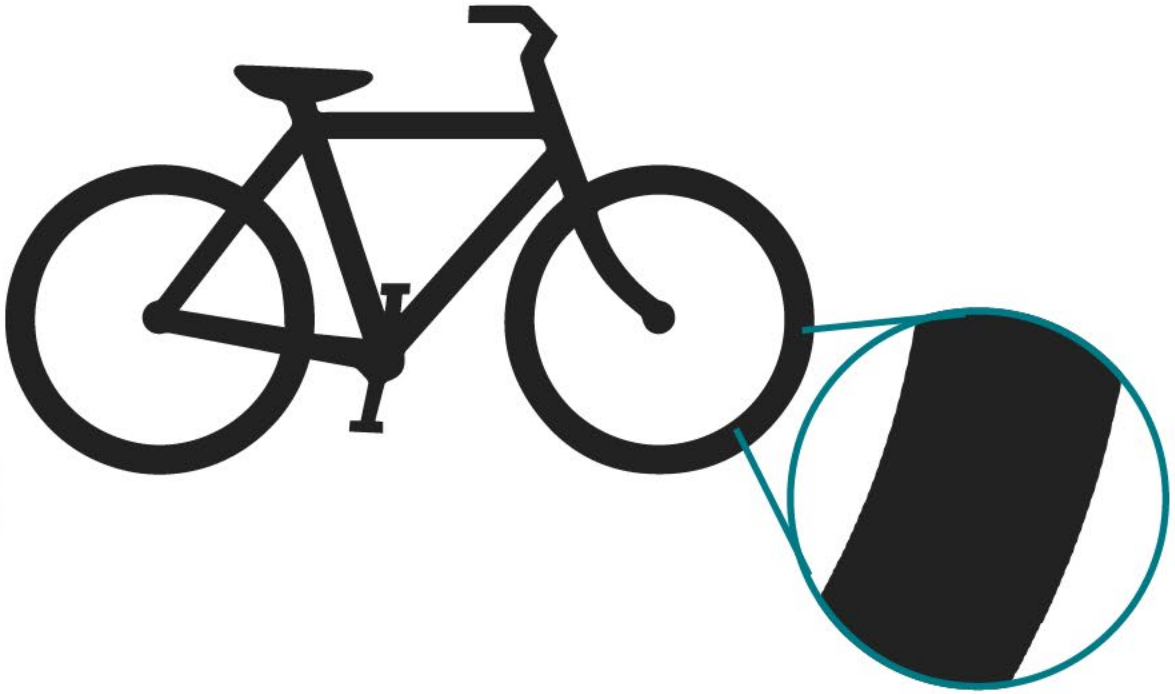
Vector Graphics

Vector images and graphics are made of points, lines, shapes, and curves based on mathematical formulas rather than a set amount of pixels, and therefore can be scaled up or down while maintaining image quality

Raster Images



Vector Graphics



What is a Design System?

- A Design System is a set of building blocks used to create Mock-ups and Prototypes
- A Design System helps keep your User Interfaces and Experiences consistent across all your products (Apps, Websites, Landing Pages, etc.)

https://www.figma.com/blog/design-systems-101-what-is-a-design-system/

What makes up a Design System?

- Design System
  - The main blueprint for your product's User Interfaces and Experiences.
  - You can think of this as a container holding everything needed for Mock-ups and Prototypes
- Component and Pattern Libraries
  - Reusable branded visual elements (buttons, drop downs, logos, footers, etc.)
- Foundational Elements
  - Branding
  - Can also include icons, images, illustrations, other branding elements (shadows, gradients, etc.)

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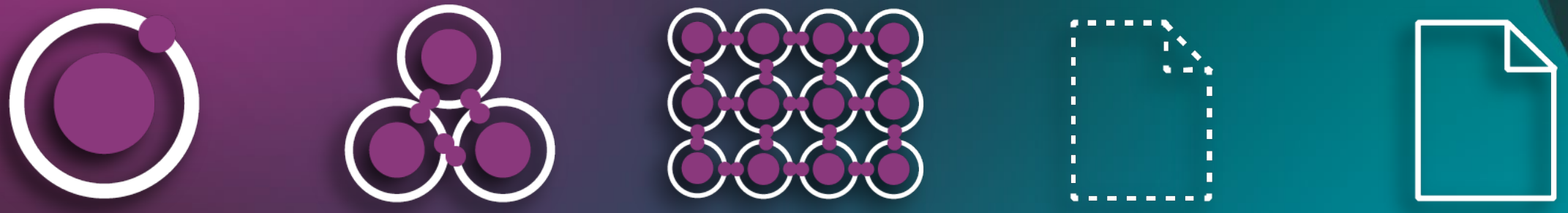
How can I make a Design System?

Atomic Design



https://atomicdesign.bradfrost.com/

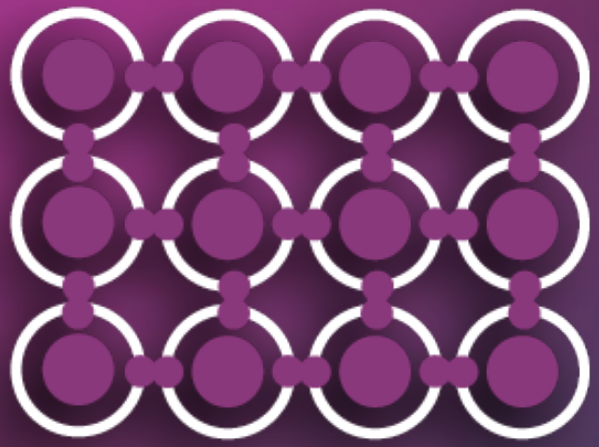
Atoms

- Atoms Serve as the foundational building blocks that comprise all user interfaces
- Includes
  - Branding
  - Basic HTML Elements
    - Buttons
    - Anchors
    - Labels
    - Inputs

https://developer.mozilla.org/en-US/docs/Web/HTML/Element

Molecules

- Molecules are simple groups of UI elements that function together as a unit
- Includes
  - Form group – label and form element
  - Search input – icon, search input, and button sometimes combined with predictive text dropdown



Organisms

- Organisms are more complex groups of UI components made from Molecules and Atoms
  - Includes
    - Website header: search, anchors, logo
    - Website footer: Social media, anchors, marketing images
    - Accordion: headers, icons, unordered lists, anchors, images, cards

Templates

Pages

- Templates combine Organisms together to create the base for unspecified pages
  - Heading, banner site title, and footer
  - Think fresh Cascade page
- Pages use the templates to create specified pages.
  - About us page contains everything from a template
  - Includes body text about an organization, maybe contact info, images, FAQ accordion, etc.